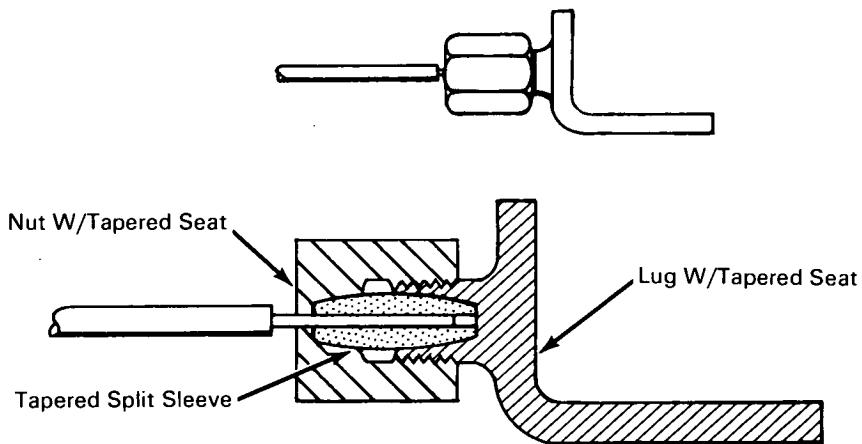


# NASA TECH BRIEF



NASA Tech Briefs are issued by the Technology Utilization Division to summarize specific technical innovations derived from the space program. Copies are available to the public from the Clearinghouse for Federal Scientific and Technical Information, Springfield, Virginia, 22151.

## Improved Solderless Connector Is Easily Disconnected



**The problem:** To design a solderless connector that can be easily disconnected and reassembled and that will resist vibration. Commonly used crimped connectors damage conductors upon disassembly.

**The solution:** A compression type connector using a tapered, split sleeve that is tightened by a nut into a mating lug.

**How it's done:** The metal sleeve, which is tapered at both ends, fits over the bare conductor. The nut is threaded only through part of its length. A tapered seat at the base of the nut is formed to receive the sleeve. The lug has a male threaded end and a tapered recess that matches the sleeve. The sleeve fits over the conductor and between the nut and the lug, and is compressed by tightening the nut onto the lug.

### Notes:

1. The connector can be used in place of standard solder lugs and to connect unsolderable wire, such as tungsten or niobium.
2. Inquiries concerning this innovation may be directed to:

Technology Utilization Officer  
Jet Propulsion Laboratory  
4800 Oak Grove Drive  
Pasadena, California, 91103  
Reference: B65-10197

**Patent status:** NASA encourages commercial use of this innovation. No patent action is contemplated.

**Source:** Hughes Aircraft Co. under contract  
to Jet Propulsion Laboratory  
(JPL-SC-060)

Category No. 01